

1. (Amended) An amplifier arrangement for amplifying a signal having a full width half maximum (FWHM) parameter, the amplifier arrangement comprising:

- an input node provided on a first transmission medium;
- an output node provided on a second transmission medium;
- a plurality of amplifiers connected in respective spaced parallel paths extending between the first medium and the second medium;
- the input node dividing an input signal into signal parts and feeding the signal parts along respective paths to the output node;
- the paths having equal propagation delays for the signal parts, to provide at the output node an output signal comprising a summation of the signal parts; and
- the amplifier arrangement being characterized in that a spacing between one of said paths and an adjacent path being at least equal to a distance through which the signal would travel in a time corresponding to its FWHM parameter.

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2. (Amended) An amplifier arrangement as claimed in claim 1 wherein the first transmission medium has one end and an opposite end, wherein the second transmission medium has one end and an opposite end and wherein the input node is provided towards the one end of the first transmission medium and the output node is provided towards the opposite end of the second transmission medium.

3. (Amended) An amplifier arrangement as claimed in claim 2 wherein the spacing between adjacent paths is constant.

4. (Amended) An amplifier arrangement as claimed in claim 3 wherein termination means is provided at the opposite end of the first transmission medium and at the one end of the second transmission medium.

6. (Amended) An amplifier arrangement as claimed in claim 4 wherein one of the first transmission medium and the second transmission medium comprises a transmission line.

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10. (Amended) An amplifier arrangement as claimed in claim 6 wherein the second transmission medium comprises a three-dimensional cavity comprising signal absorbent means.

11. (Amended) A method of amplifying a signal having a full width half maximum (FWHM) parameter comprising the steps of:

- at an input node, dividing the signal into signal parts propagating along respective spaced paths to an output node;
- amplifying the signal parts in the paths by amplifying means in the paths;
- causing a propagating delay in each of the paths to be the same; and
- characterized by causing a spacing between adjacent paths to be at least equal to a distance through which the signal would travel in a time corresponding to the FWHM parameter of the signal, thereby at the output node, coherently summing the amplified signal parts, to provide an output signal; and incoherently summing noise added by the amplifying means.

12. (Amended) A method as claimed in claim 11 wherein the output signal is caused to propagate in predominantly a first direction towards an output, wherein noise is caused to propagate in another direction as well, and wherein the noise propagating in the other direction is absorbed by termination means.

15. (New claim) A noise suppressing amplifier arrangement comprising:
 an input node provided on a first transmission medium;
 an output node provided on a second transmission medium; and
 a plurality of amplifiers connected in respective spaced parallel paths extending between the first medium and the second medium,

wherein the input node divides an input signal into signal parts and feeds the signal parts along respective paths to the output node;

wherein the paths having equal propagation delays for the signal parts; and
 wherein the second transmission medium comprises one of a two dimensional conductive layer and a three dimensional cavity arranged to allow signals to propagate in more than